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EXAMINER

LIN, KUANG Y

ART UNIT

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/687,231
Filing Date: October 16, 2003
Appellant(s): BEALS ET AL.

MAILED
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GROUP 1700

____ Barry L. Kelmachter ____

For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed February 10, 2006 appealing from the Office action mailed September 14, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US 6,807,734	Eldridge et al.	10-2004
US 2004/0,016,119	Eldridge et al.	1-2004

US 4,499,366	Yoshida et al.	2-1985
US 5,243,757	Grabbe et al.	9-1993

(9) Grounds of Rejection

In view of appellant's remarks, the rejection under 35 USC 112, second paragraph is hereby withdrawn.

The rejection under 35 USC 102(b) as being anticipated by Grabbe or Yoshida as set forth below had been modified to exclude claim 12 to simplify the issue.

Also, the rejected under 35 U.S.C. 103(a) as being unpatentable over Kelso et al. in view of Terpay is hereby withdrawn to simplify the issue.

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 11-15 and 18-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Eldridge et al (US 6,807,734).

In col. 11, line 5 of the reference, it states that W, Mo and other refractory metals, and their alloy may be used for making spring contact elements. The configuration or shape of the spring contact elements shown in the drawings, particularly figures 3A-3C, are similar to the refractory metal core as claimed.

The element 108, 308 in figures 3A and 3B of the reference are considered as claimed spring tab. With respect to claim 12, figure 4B and 4C of the reference show that there are one tab at one end (the shape similar to 108, 308) and other tab (the portion which contacts adhesive 410) at the other end of the element 402. Thus, they are spaced apart spring tabs.

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2. Claims 11, 13-15 and 18-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Grabbe et al. or Yoshida et al.

The element 14 of Grabbe et al. and elements 70, 80 of Yoshida et al., respectively, may be made of Tungsten (see col. 2, line 42 in Grabbe and col. 3, line 7 in Yoshida). The portion 76 of element 14 of Grabbe (see figure 3) and the bending (U-shaped) portion in element 70 of Yoshida (see figure 4), respectively, are considered to be a spring tab. Section 78 or left hand portion of section 72 of Grabbe and left hand portion close to center point of element 70 of Yoshida are considered to be a planar central portion as claimed.

3. Claims 11-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2004/0016119 to Eldridge et al. and further in view of US 6,807,734 to Eldridge et al.

Publication '119 substantially shows (see sections [0004], [0053] and figures 5A-5C and 7B) the invention as claimed except that it does not show what spring contact array is made of. However, in [0004] of Publication '119 as well as col. 11, lines 1-7 of patent '734, they disclose that the spring contact may be made of tungsten, molybdenum or other refractory metal. It would have been obvious to make the spring contact of Publication '119 of refractory metal in view of patent '734. In Publication '119 the elements 224, 234, 244 shown in figured 5A-5C and element 257 shown in figure 7B are considered as spring tabs. The slot 260 shown in figure 7B and the recesses in element 324 shown in figures 9A-9D are considered as locking means.

(10) Response to Argument

- a. Since the rejection under 35 USC 112, second paragraph have been withdrawn by the examiner, appellants' argument with respect to the rejection is moot.
- b. In page 8, last paragraph of the brief, appellants stated that "the Board should give the language of the preamble patentable weight since it gives life, meaning, and vitality to the claim and since this language serves to distinguish the prior art." However, if the body of a claim fully and intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitation, then the preamble is not considered a limitation and is of no significance to claim construction. "Where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claimed limitation." See *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 51 USPQ 2d 1161,1165. See also *Rowe v. Dror*, 42 USPQ2d 1550, 1553. Thus, the intended use for the invention as recited in the preamble of claims 11 and 14, respectively, is not a claimed limitation. Therefore, the structure as claimed broadly reads on the '734 patent to Eldridge et al. and also the '757 patent to Grabbe et al., and the '366 patent to Yoshida et al.

c. In page 9, last paragraph of the remarks, appellants pointed to col. 9, lines 33-34 of the '734 patent and further stated that element 108 is a patterned masking layer. However, as clearly stated in the final rejection that the elements 108, 308 in **figures 3A and 3B** of '734 patent are considered as spring tab. Since the resilient spring contact element 300 (see col. 12, line 8-13) is made of refractory metal, such as tungsten, molybdenum (see col. 11, lines 1-9), tip 108, 308 thereof also possesses springing function. Thus, the claimed refractory metal core reads on the resilient spring contact element 300 of '734 patent, which has a planar central portion 306 and at least one integrally formed spring tab means 108, 308 which is capable of providing spring loading.

d. Throughout the brief (see also page 4, last paragraph of appellants' remarks filed Dec. 9, 2005 in response to the final rejection) appellants argued that the examiner has failed to consider the functional limitations as set forth in claims 11 and 14. It appears to the examiner that appellants are arguing that they are claiming components of the refractory metal core in terms of "means plus function" format. However, section 112, paragraph 6 provides that "[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function **without** the recital of structure, material, or acts in support thereof." 35 U.S.C. § 112, para. 6 (1994). See also *Watts v. XL Systems Inc.*, 56 USPQ2d 1836 (CA FC 2000). Namely, a claim limitation will be

interpreted to invoke 35 USC 112, sixth paragraph, if the phrase “means for” **must not** be modified by sufficient structure, material for achieving the specified function. See MPEP 2181 at page 2100-229. In claim 11 of the instant application it recites “**integrally formed spring tab means**”. In claim 12, it recites “said spring tab means includes a **plurality of spaced apart spring tabs**”. In claim 14, it recites “said core element comprising a core element formed from a **refractory metal material**”. In claim 22, it recites “said spring tab means comprises at least one spring tab having a **tapered end**”. In claim 23, it recites “said spring tab means comprises at least one spring tab having a **non-tapered end**.” The spring tab means in those claims is either modified by sufficient structure or material and thus can not be interpreted to invoke 35 USC 112, sixth paragraph.

e. In page 11, last paragraph of the brief, appellants stated that ‘734 patent only describes a single element 308 on a single contact element 300. However, figure 4B and 4C of ‘734 patent show that there are one tab at one end (the shape similar to 108, 308) and other tab (the portion which contacts adhesive 410) at the other end of the element 402. Thus, claim 12 reads on element 402 of ‘734 patent.

f. The argument with respect to the functional limitation of claim 19 is moot since the claim format can not be interpret to invoke 35 USC 112, sixth paragraph.

g. With respect to claims 20 and 24, figures 12F, 13A and 13B of '734 patent show that feature. With respect to claim 21, figures 3A-3C and 4A-4C show both ends of the element 300, 402 attached to the planar central portion at an inclined angle. With respect to claims 22 and 23, it is apparent that the tab means of '734 patent can be any configuration as long as it will perform the contacting function.

h. In pages 13-15 of the brief, appellants stated that the element 14 of Grabbe et al. and element 70, 80 of Yoshida et al. lack a planar central portion. However, section 78 or left hand side of section 72 (see figure 3) and left hand portion close to center point of element 70 of Yoshida are considered to be a planar central portion. Again since claims 11 and 14 can not be interpreted to invoke 35 USC 112, sixth paragraph for the reasons as set forth supra, the argument with respect to the functional limitation is moot.

i. With respect to claim 12, the rejection under 35 USC 102(b) as being anticipated by Grabbe or Yoshida as set forth supra had been modified to exclude that claim. Thus, the argument with respect to claim 12 is moot. With respect to claims 15 and 21, since the left hand side of section 72 (see figure 3) of Grabbe and left hand portion close to center point of element 70 of Yoshida are considered to be a planar central portion and also since 0 degree is also an angle, the right hand end element 14 of Grabbe and element 70 of Yoshida form a 0 degree with the

planar central portion defined supra. With respect to claim 19, see paragraph "h" supra. With respect to claims 20 and 24, figure 3 of Grabbe shows that planar central portion 78 forms a right angle with end portion 80. With respect to claims 22 and 23, it is apparent that the tab means 76 of Grabbe and that of Yoshida in element 70 shown in figures 4 and 5A can be any configuration as long as it will perform the contacting function.

j. In page 17 of the brief, appellants stated that Eldridge '119 is directed to a method of making a microelectronic spring contact and has nothing to do with a refractory metal core for maintaining a core in a desired position with respect to a wax die. Again since claims 11 and 14 can not be interpreted to invoke 35 USC 112, sixth paragraph for the reasons as set forth supra, the argument with respect to the functional limitation is moot. Also, in '119 patent, each of element 220, 230 and 240 is capable of performing the function as claimed. Further, as shown in figure 5A-5C and 7B, each of elements 220, 230 and 240 is provided with section 224, 234 and 244, respectively. Sections 224, 234 and 244 are considered to be spring tab means. Since each section of 224, 234 and 244, respectively, protrudes (or extends outwardly) from both side of elements 220, 230, and 240, and each side of sections 224, 234 and 244 is considered a spring tab means, the entire section of 224, 234 and 244 is considered to consist of two spring tab means. Thus, element 220, 230 and 240 is considered to be provided with a spaced spring tab means as

claimed (claim 12). Further, the spring tab means 224 is non-tapered (claim 23) while spring tab means 234, 244 is tapered in shape (claim 22). With respect to claims 13 and 18, '734 patent shows (col. 11, lines 1-7) that feature to be conventional. The argument with respect to claims 15 and 19 as appearing on pages 17 and 18 of the brief is moot since these claims can not be interpreted to invoke 35 USC 112, sixth paragraph for the reasons as set forth supra and also the element 220, 230 and 240 of '119 patent is capable of performing the claimed function. With respect to claims 16 and 17, the slot 260 shown in figures 7B and the recesses in 324 shown in figures 9A-9D are considered as locking means. With respect to claims 20, 21 and 24, the bending angles of 220, 230 and 240 depend on the relative position between element 256 and 250 (figure 7A). Also, the bending angles can be varied as shown in figures 9D and 10. Thus, it would have been obvious to obtain the optimal angles through routine experimentation.

k. The rejection based on the Kelso et al. in view of Terpay had been withdrawn. Thus, appellants' argument with respect to those references is moot.

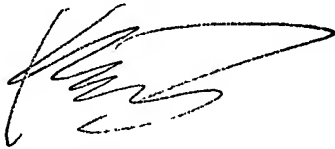
(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'Kuang Y Lin', written in a cursive style.

Kuang Y Lin

Conferees:

Patrick Ryan

A handwritten signature in black ink, appearing to be 'Patrick Ryan', written in a cursive style.

Steve Griffin

A handwritten signature in black ink, appearing to be 'Steve Griffin', written in a cursive style.